

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 6 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

### REMARKS

Claims 1-32 were in the application as filed. Pursuant to a Restriction Requirement, claims 12, 13, 16, 28, 29 and 32 have been withdrawn without prejudice from consideration in this application.

Claims 1-11, 14, 15, 17-27, 30, and 31 stand rejected. In this Response, claim 1 has been amended to clarify the elements comprising the invention of claim 1. Claims 11 and 27 have been amended to clarify the slope direction of the chamfered end. Claims 2-8, 10, 11, 14, 15, 17-26, 30, and 31 remain unamended.

The amendments made herein add no new matter. Reconsideration and reexamination of the application is respectfully requested in view of the amendments and the following remarks.

#### Rejections under 35 U.S.C. §102(b)

Claims 1-5, 7-10, 17-21, and 23-26 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 6,508,477 to Burkett. The rejection is respectfully traversed.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986).

Claim 1 relates to a gas cylinder base. The gas cylinder base is adapted to support a gas cylinder having a base ring. The gas cylinder base comprises a base skirt and a support element extending upwardly from the base skirt. The support element is adapted to slidably receive the gas cylinder base ring.

Burkett '477 discloses in Figures 6-9 a gas cylinder 14' having at its lower end a fitting 22' comprising a solid boss 24'. A threaded opening 80' is formed coaxially in, but not through, the boss 24'. Except for the threaded opening 80', the fitting 22' is a generally solid cylindrical body. The fitting 22' is received in a recess 56' formed in a bottom member 34' by a downwardly-depending peripheral vertical wall. The recess 56' is provided with an aperture 84' coaxially aligned with the opening 80'.

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 7 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

First, Burkett '477 does not disclose the base skirt and the support element extending upwardly from the base skirt required in claim 1. The Examiner identifies element 42' of Burkett '477 as a base skirt, and the recess 56' as a support element. However, the Examiner improperly ignores the requirement in claim 1 that the support element extend upwardly from the base skirt. The Examiner simply asserts that this is disclosed in Burkett '477, notwithstanding the fact that Burkett '477 clearly illustrates (See, e.g. Figure 7) the Examiner's "support element" as a recess extending downwardly from the Examiner's "base skirt."

The Examiner offers no factual support for the assertion that the recess having a downwardly-depending peripheral vertical wall 56' extends upwardly from the base skirt 42'. Indeed, because Burkett '477 so clearly illustrates the downward, recessed configuration of the "support element," no such factual support can be offered. Burkett '477 does not disclose an element of claim 1, i.e. a support element extending upwardly from a base skirt, and thus does not anticipate claim 1.

The structure described in claim 1 is clearly and fundamentally different than the structure disclosed in Burkett '477. Burkett '477 does not disclose a support element extending upwardly from a base skirt as required in claim 1. Thus, claim 1 is not anticipated by Burkett '477 because each and every element of claim 1 is not found in Burkett '477.

Applicants submit that claim 1 is in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claim 1, and notification of the allowance of claim 1.

Claims 2-5 and 7-10 depend, directly or indirectly, from claim 1. For the reasons discussed above with respect to the errors in the rejection of claim 1, claims 2-5 and 7-10 are not anticipated by Burkett '477. Nevertheless, Burkett '477 does not disclose other required elements of claims 2-5 and 7-10.

Claim 2 requires that the first lateral dimension [of the base skirt] be greater than the diameter of the gas cylinder. Nowhere in Burkett '477 is this disclosed. There is no written description of the dimensional relationship between the gas cylinder 14 and the remaining structural elements. The figures similarly do not clearly disclose such a dimensional relationship.

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 8 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

At best, the figures are ambiguous in this respect.

Claim 3 requires that the support element comprise at least one aperture "therethrough." As discussed above, the Examiner's "support element" comprises a boss 24' with a threaded aperture 80'. However, as clearly illustrated in Figure 9, the aperture 80' does not extend through the boss 24'. The aperture 80' only extends partway into the boss 24'.

Claims 4 and 5 depend from claim 3 and, thus, for the same reasons, cannot be anticipated by Burkett '477.

Claim 7 depends from claim 5 and, thus, cannot be anticipated by Burkett '477. Claim 8 also depends from claim 5 and, additionally, requires a fastener with a point for engaging the base ring. Such a fastener is not disclosed in Burkett '477. Indeed, because the fastener in Burkett '477 is threaded into the gas cylinder, there is no need for a point to engage the gas cylinder. Again, the Examiner simply asserts, without any factual support, that the fastener has a point.

Claim 9 depends from claim 7 and, thus, cannot be anticipated by Burkett '477. Claim 10 requires that the support element comprise a continuous support ring. The Examiner's "support element" is a recess, not a ring. Thus, claim 10 is not anticipated by Burkett '477.

Because each and every element of claims 2-5 and 7-10 is not found in Burkett '477, claims 2-5 and 7-10 are not anticipated by Burkett '477. Applicants submit that claims 2-5 and 7-10 are in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claims 2-5 and 7-10, and notification of the allowance of claims 2-5 and 7-10.

Independent claim 17 is essentially identical to independent claim 1, with the positive recitation of the gas cylinder having the base ring. The Examiner has presented no additional arguments in support of the rejection of claim 17. Thus, because claim 17 requires a support element extending upwardly from a base skirt, which is not disclosed in Burkett '477 as discussed above with respect to claim 1, claim 17 is not anticipated by Burkett '477.

Claim 17 further requires a gas cylinder having a base ring, and a fastener that can engage the base ring of a gas cylinder, neither of which is disclosed in Burkett '477.

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 9 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

The gas cylinder of Burkett '477 has no base ring. The Examiner claims that the fitting 22' and boss 24' comprise a ring. However, the fitting 22' and boss 24' disclosed in Burkett '477 can in no way be construed as a ring.

"When examining claims for patentability, claims are interpreted as broadly as is reasonable and **consistent with the specification**.... 'The general rule is, of course, that terms in the claim are to be given their **ordinary and accustomed meaning**.' *In re Thrift*, 298 F.3d 1357, 1364 (Fed. Cir. 2002) (citations omitted, emphasis added).

A ring is defined as "an object having the form of a circle." *The Oxford English Dictionary*, 2d Ed. (Clarendon Press, 1991). A circle is defined as "a plane curve everywhere equidistant from a given fixed point, the center." *The American Heritage Dictionary of the English Language*, 4<sup>th</sup> Ed. (Houghton Mifflin Company, 2000). The ordinary meaning of "ring" is a circular curve circumscribing an open space extending completely through the ring, which enables the ring to be inserted over a body (such as a finger, a barrel, a napkin) with the body extending completely through the open space. The specification describes the base ring of the gas cylinder consistent with these definitions: "The base ring 14 is a generally ring-like annular structure formed of a thin strip of metal, such as steel, and fixedly attached to the cylinder body 13, such as by welding." *Application as Filed*, Paragraph [0016].

In contrast, Burkett '477 discloses a solid cylindrical boss 24' having a threaded opening extending into, but not through, the boss 24', and having a diameter much smaller than the diameter of the boss 24'. Because the threaded opening does not extend through the cylindrical boss 24', the cylindrical boss 24' cannot constitute a ring. Simply calling the cylindrical boss 24' a "ring", as the Examiner has done, does not make it so. The Examiner is improperly stretching the definition of "ring" to include a structure that is unrecognizable as such, which is not consistent with the specification, and ignores the ordinary and accustomed meaning of "ring."

Because the fitting 22' and boss 24' do not comprise a ring as required in claim 17, Burkett '477 does not disclose a gas cylinder having a base ring, and thus does not disclose a gas cylinder base which can support a gas cylinder having a base ring. Since this element is not disclosed in Burkett '477, Burkett '477 does not anticipate claim 17.

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 10 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

Claim 17 also requires a fastener that can engage the base ring of the gas cylinder. Because Burkett '477 does not disclose a gas cylinder having a base ring, it does not disclose a fastener that can engage a base ring.

Claims 18-21 and 23-26 depend from claim 17 and are essentially identical to claims 2-5 and 7-10, respectively. For the reasons discussed above with respect to claims 2-5 and 7-10, claims 18-21 and 23-26 are not anticipated by Burkett '477.

Because each and every element of claims 17-21 and 23-26 is not found in Burkett '477, claims 17-21 and 23-26 are not anticipated by Burkett '477. Applicants submit that claims 17-21 and 23-26 are in condition for allowance. Thus, Applicants request the withdrawal of the rejection of claims 17-21 and 23-26, and notification of the allowance of claims 17-21 and 23-26.

#### **Rejections under 35 U.S.C. §103(a)**

Claims 11, 14, 15, 27, 30, and 31 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Burkett '477 "as applied to claims 1, 10, 17, and 26 above, referencing the embodiment taught in Figs. 1-5." The rejection is respectfully traversed.

Initially, the asserted combination of the two embodiments illustrated in Burkett '477 is traversed. The asserted combination fails to meet the *prima facie* standard for combining references under 35 U.S.C. §103(a), and is therefore improper.

Figures 1-5 of Burkett '477 disclose a gas cylinder 14 having a lower polar end 18 and a lower base portion 26 attached to the lower polar end 18 through a cylindrical boss 24 extending from the lower polar end 18. The cylindrical boss 24 is rigidly affixed within an opening 30 in the base portion 26. The base portion 26 is a somewhat conical-shaped body, with the opening 30 defining an annular wall at an upper portion of the base portion 26. Figure 5 of Burkett '477 illustrates the annular wall as having a somewhat rounded shoulder along the outer edge thereof. Figures 6-9 disclose no rounded or chamfered edge.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 11 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

the relevant art would lead that individual to combine the relevant teachings of the references. The Examiner cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1780, 1783 (Fed. Cir. 1988). When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references. *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight. *In re Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. See, also, *Manual of Patent Examining Procedure* §706.02(j).

Section 706.02(j) of the Manual of Patent Examining Procedure is explicit as to what must be done to support a rejection under 35 U.S.C. §103(a).

“After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 12 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. 'To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

The Examiner has not identified any teaching, suggestion, or motivation in Burkett '477 for making the combination asserted by the Examiner as is required to meet the *prima facie* standard. The Examiner has provided no explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. The Examiner has not identified the relevant teachings of the prior art relied upon to make the asserted combination. The Examiner is simply relying on impermissible hindsight reconstruction to craft a combination from Burkett '477 allegedly having all the limitations of claims 11, 14, 15, 27, 30, and 31.

#### Claims 11 and 27

The Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the gas base with a chamfered edge, based upon an asserted combination of the two embodiments illustrated in Figures 1-5 and 6-9, respectively, in Burkett '477. However, the Examiner offers no support for this conclusion, and has not identified any teaching, suggestion, or motivation in Burkett '477 for combining the two embodiments.

Applicant's chamfered lip is used to engage and support the rounded bottom shoulder of the portable gas cylinder, and aid in the coaxial seating of the gas cylinder and the cylinder base ring in the gas cylinder base. See, *Published Application No. US2004/0016855*, ¶[0021]. In contrast, Burkett '477 discloses the insertion of a boss into a recess to attach the gas cylinder to the gas base. In both embodiments of Burkett '477, the rounded bottom of the gas cylinder does not contact the support structure, which eliminates any benefit of a chamfered

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 13 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

edge as recited in claims 11 and 27, and thus obviates any motivation for combining both embodiments.

Furthermore, Burkett '477 discloses two embodiments that are clearly identified in the patent as separate and distinct. Each embodiment is equally capable of a satisfactory supporting function without incorporating any element from the other. Thus, there would be no incentive to combine the two embodiments in the manner asserted by the Examiner. There is simply nothing with respect to either embodiment in Burkett '477 to suggest the use of a radially-inwardly sloping chamfered end, and the Examiner has pointed to no such suggestion. The Examiner is simply engaging in impermissible hindsight reconstruction using Applicants' disclosure as a blueprint to supply elements missing from each embodiment of Burkett '477 in order to assert the obviousness of claims 11 and 27.

Assuming, *arguendo*, that the asserted combination is tenable, it would still fail to meet the invention disclosed in claim 11 and claim 27 because the combination is lacking a necessary element of the claimed invention. Claims 11 and 27 depend from claims 1 and 10, and 17 and 26, respectively, and thus require a support ring extending upwardly from a base skirt, and the support ring terminating in a radially-inwardly sloping chamfered end.

As discussed previously, the embodiment illustrated in Figures 6-9 of Burkett '477 does not have a support ring extending upwardly from a base skirt. The Examiner argues that the embodiment illustrated in Figures 1-5, however, shows "a gas circular cylinder base (54) which has a support ring (upper part of 26) which terminates in a radially inwardly sloped chamfered end..., the support ring having a circular base skirt (lower part of 26) which is coaxial with a support element." Contrary to the Examiner's assertion, the combination does not meet the invention of claims 11 and 27, because it would disclose nothing more than a gas cylinder base having an outwardly-directed rounded shoulder. This is not the invention of claims 11 and 27.

The asserted combination does not have a radially-inwardly sloping chamfered end as required by claims 11 and 27. The Application, including Figures 1 and 2 of the Application, describes an embodiment of the invention comprising a chamfered end 28 of a support element



Serial No. 10/604,008  
Filed: June 20, 2003  
Page 14 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

22 having a face 29 which slopes radially inwardly. The face 29 engages and supports the rounded bottom shoulder 18 of the portable gas cylinder 12, and aids in the coaxial seating of the gas cylinder 12 and the cylinder base ring 14 in the gas cylinder base 10.

The Examiner's assertion that the upper part of element 26 of Burkett '477 terminates in a radially inwardly sloping chamfered end is patently inaccurate. This structure is not disclosed in Burkett '477. The rounded shoulder of the upper part of element 26 is not an inwardly sloping chamfered end; it is outwardly sloping. Furthermore, the Examiner concedes that chamfered means "beveled or inclined or slanted." The rounded shoulder is not chamfered, i.e. not beveled, inclined, or slanted, because it is rounded. The Examiner's argument constitutes nothing more than broad conclusory statements which, standing alone, are not evidence. *Dembiczak, supra*.

Claim 27 also requires a gas cylinder having a base ring and a gas cylinder base comprising a support ring adapted to slidably receive the base ring of the gas cylinder. As described previously, the gas cylinder illustrated in Figures 6-9 is not provided with a base ring. The gas cylinder illustrated in Figures 1-5 also fails to disclose a gas cylinder having a base ring. Nowhere in Burkett '477 is there any disclosure of the embodiments in Figures 1-5 and 6-9 being adapted to engage a gas cylinder having a base ring, and neither embodiment appears to be capable of doing so. Thus, the combination of the two embodiments illustrated in Figures 1-5 and 6-9 fails to meet the invention of claim 27 because the combination fails to disclose a gas cylinder having a base ring and a support ring which can slidably engage the base ring.

Nevertheless, claims 11 and 27 have been amended to clarify that the chamfered end is located along an inner edge of the support ring.

#### Claims 14 and 30

Claims 14 and 30 require that the base skirt be circular. The Examiner asserts that it would have been obvious from the teachings of the embodiment illustrated in Figures 1-5 to make the gas base circular. Claims 14 and 30 depend from claims 1 and 17, respectively.

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 15 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

Thus, claims 14 and 30 incorporate all limitations of claims 1 and 17. As discussed above, claims 1 and 17 require a support ring extending upwardly from a base skirt, the support ring terminating in a radially-inwardly sloping chamfered end, neither of which is disclosed in Burkett '477. Because the asserted combination of both embodiments does not reach the invention of claims 1 and 17, the asserted combination does not reach the invention of claims 14 and 30.

### **Claims 15 and 31**

Claims 15 and 31 require the support element be coaxial with the base skirt. This is illustrated in Figures 1 and 2 in which the support element 22 is coaxial with the base skirt 20. The Examiner asserts that it would have been obvious from the teachings of the embodiment illustrated in Figures 1-5 to make the gas base coaxial. Claims 15 and 31 depend from claims 1 and 17, respectively. Thus, claims 15 and 31 incorporate all limitations of claims 1 and 17. As discussed above, claims 1 and 17 require a support ring extending upwardly from a base skirt, the support ring terminating in a radially-inwardly sloping chamfered end, neither of which is disclosed in Burkett '477. Thus, the asserted combination does not reach the invention of claims 15 and 31.

### **Claims 6 and 22**

Claims 6 and 22 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Burkett '477 "as applied to claims 1, 3-5, 17, 19-21 above" in view of U.S. Patent No. 6,709,222 to Inman, Jr. The rejection is respectfully traversed.

Initially, the asserted combination of Burkett '477 and Inman '222 is traversed. The asserted combination fails to meet the *prima facie* standard for combining references under 35 U.S.C. §103(a), and is therefore improper.

Inman '222 discloses a hand truck 10 having support elements 26, 28, such as arms and forks, for supporting various items on the hand truck. The support elements 26, 28 can be configured in selected positions and retained in place by a system of pins 54. The pins 54 are identified in Inman '222 as spring clip type pins, wire lock pins, detent ring pins, and "any

Serial No. 10/604,008  
Filed: June 20, 2003  
Page 16 of 17

Examiner: Amy J. Sterling  
Group Art Unit: 3632

other similar method of securing the arms and forks in position." Col. 3, ln. 15-20. Nowhere in Inman '222 is there any reference to thumb screws.

Burkett '477 discloses a wheeled frame 12 having a configuration virtually identical to a hand truck. The Examiner has not identified any teaching, suggestion, or motivation in either Burkett '477 or Inman '222 for making the combination asserted by the Examiner as is required to meet the *prima facie* standard. The Examiner has provided no explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. The Examiner has not identified the relevant teachings of the prior art relied upon to make the asserted combination.

The Examiner is simply relying on impermissible hindsight reconstruction to craft a combination from Burkett '477 and Inman '222 allegedly having all the limitations of claims 6 and 22. However, a person of ordinary skill in the art would not be motivated to look to a patent disclosing a hand truck to combine with a patent already disclosing a similar hand truck.

Even if the combination were tenable, it still would not meet the inventions of claims 6 and 22. The Examiner asserts that Inman '222 illustrates the use of thumb screws to support a gas cylinder which, in combination with Burkett '477, renders Applicants' gas cylinder base obvious. However, the gas cylinder C in Inman '222 is secured to the hand truck 10 by straps 50, not pins. Furthermore, the pins 54 are not used to secure any item being transported, including the gas cylinder, by the hand truck 10. Rather, the pins 54 are used to secure the support elements 26, 28 in either a horizontal or vertical position on the hand truck 10. The elements identified in Figures 1-5 of Inman '222 with the numeral 54 may have an appearance similar to a thumb screw. However, Inman '222 makes it clear that these elements are pins, not thumb screws. Thus, no combination of Burkett '477 and Inman '222 discloses the invention of claims 6 and 22.

Claims 11, 14, 15, 27, 30, and 31 are not rendered obvious by the Examiner's asserted combinations. The Examiner has done nothing more than engage in impermissible hindsight reconstruction of Applicants' invention using Applicants' disclosure as a blueprint. Thus, claims 11, 14, 15, 27, 30, and 31 are in condition for allowance. Applicants request the withdrawal of

Serial No. 10/604,008

Filed: June 20, 2003

Page 17 of 17

Examiner: Amy J. Sterling

Group Art Unit: 3632

the rejection of claims 11, 14, 15, 27, 30, and 31, and notification of the allowance of claims 11, 14, 15, 27, 30, and 31.

### CONCLUSION

For the reasons discussed above, claims 1-11, 14, 15, 17-27, 30, and 31 are in condition for immediate allowance. It is respectfully submitted that all of the pending claims in the application are allowable over the prior art of record. Notification of allowability is respectfully requested. Applicants respectfully request an Advisory Action be issued in this case.

If there are any remaining issues which the Examiner believes may be resolved in an interview, the Examiner is respectfully invited to contact the undersigned.

Respectfully submitted,

STEVEN J. AND MARIANNE E. BERRY



Michael F. Kelly, Reg. No. 50,859  
McGARRY BAIR PC  
171 Monroe Ave., NW; Ste. 600  
Grand Rapids, Michigan 49503  
(616) 742-3500

Dated: 2/3/05

G0153222